

FINAL DRAFT ADVICE (02-24-2022)

Topic: FY2024 Cleanup Priorities

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Originating Committee: Budgets & Contracts Committee (BCC)

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Subject: FY2024 Hanford Cleanup Priorities

References: 1. Hanford Advisory Board Consensus Advice #309, "FY2023 Hanford Cleanup Priorities," dated March 17, 2021.
Link: https://www.hanford.gov/files.cfm/signed_steve_fy2023.pdf
2. "Hanford Site 5 Year Plan," Revision 3 Draft, dated October 11, 2021.
Link: https://www.hanford.gov/files.cfm/HMIS_5YearPlan-Placemat-3-0_1011.pdf
3. Letter issued to Messrs Vance (DOE), Bowen (Ecology), Einan (EPA), "Summary of General Public Comments to Draft DOE 5-Year Plan," dated November 17, 2021. Link: https://www.hanford.gov/files.cfm/Letter_from_Jackson_Sutton_Galioto_HAB_Members.pdf

Background:

The Hanford Advisory Board (Board) has prepared this assessment of FY 2024 priority cleanup activities for Department of Energy (DOE) information and consideration. The Board requests that DOE include these activities in the upcoming FY2024 Hanford budget request to be submitted to DOE-Headquarters (DOE-HQ). The Board will also submit this letter to DOE as a part of the associated public comment period.

This assessment continues the approach taken last year (in preparing Reference 1) to utilize DOE's most recently available Hanford Site 5 Year Plan (Reference 2) as a guide. In addition, public comments were incorporated from the summary of comments

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provided to DOE at the October 20, 2021 public meeting of the 5-Year Plan presentation (Reference 3).

The three general categories of activities used in Reference 2 are also used in this Advice, with those being:

- Tank Waste Cleanup
- Central Plateau Cleanup
- River Corridor Cleanup

The additional category of “Indirect/Supporting Activities” was added by the Board to capture activities not directly related to a specific cleanup activity. Note that in Reference 1 these activities were referred to as “Cross-Cutting Activities.

The Board has continued the practice begun in Reference 1 to further prioritize specific activities within each of these four areas into two Levels, defined as:

Critical – Those activities that the Board believes must be funded in FY2024 to assure completion as scheduled (whether that completion is scheduled in FY2024 or in a following FY), or to accelerate the currently planned completion date.

Important – Those activities that the Board believes should be prioritized within available funding in FY2024 to achieve scheduled completion in that year or at least to make significant progress towards completion in a following FY.

During the Board’s October 20, 2021 meeting, DOE suggested that the Board consider modifying the focus of this advice from a single fiscal year (FY2024) to a timeframe spanning the scope of the most recent DOE 5-year plan (FY2022 through FY2026). It was decided by the Board to not adopt this change for the following reasons:

- A number of the Board’s recommended cleanup activities reflect an acceleration of completion compared to the 5-Year Plan. Thus it would be necessary to distinguish this difference by stating the desired FY completion date for each recommended activity and to indicate it is an acceleration to DOE’s planning.
- This approach would seem to lessen the focus on DOE to complete cleanup activities as planned on a FY-by-FY basis.

Advice:

The following table summarizes the Board’s recommended cleanup priorities in FY2024. Note that activities in the 5-year plan identified to be completed prior to FY2024 are not

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listed in this table, but if they are not completed prior to FY2024 they should also be added to the FY2024 list.

In addition, the Board recognizes the importance of completing activities that DOE determines each year to be necessary for assuring the Hanford facilities can achieve Minimum-Safe (min-safe) conditions, and those activities associated with critical maintenance and infrastructure that support all cleanup activities performed at Hanford. The Board assumes that they include activities necessary for assuring personnel safety, the safe storage of tank waste and the tank integrity program, and establishing/ maintaining the operational status of the 242-A evaporator. These min-safe, maintenance, and infrastructural support activities demand a significant commitment of both funding and manpower to accomplish. The Board agrees that these activities must be performed to facilitate completion of all other work activities, and must be supported before all other work activities. Thus, they are not addressed specifically in the Table below.

In the spirit of transparency, we request that each of the TPA agencies respond regarding whether their organization will or will not support these Board-identified priorities for Hanford cleanup in FY2024.

Table 1: FY2024 Recommended Cleanup Priorities

NOTE: Acronyms utilized in the Table below are shown at the end of the Table.

NOTE: The “Item” column below is used as an identifier, and does not represent any order of priority.

Item	Priority Level	FY2024 Cleanup Activity Description
		Tank Waste Cleanup
TW-a	Critical	DFLAW: Operate DFLAW and increase throughput to reach full capacity levels of waste vitrification (21 metric tons of glass per day).
TW-b	Critical	SST Leak Detection, Characterization, Mitigation, Cleanup, and Communication Plan: Complete plan to address the process to be followed for SST tank leaks.
TW-c	Critical	Leaking SST Retrieval: Initiate retrieval activities for SSTs known to be leaking.
TW-d	Important	SST Retrieval: Complete retrieval activities for SSTs (complete AX Farm retrieval and initiate A Farm retrieval in FY2024).

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Item	Priority Level	FY2024 Cleanup Activity Description
TW-e	Important	WTP: Continue design & construction activities supporting the WTP high level waste facilities TPA milestone.
TW-f	Important	E/W Transfer Line: Complete activities needed to put 200-E/W tank waste Transfer Line into service.
TW-g	Important	Tank Vapors: Continue engineered vapor exposure controls for Tank Farm areas.
TW-h	Important	Additional Tank Storage: Complete design and permitting activities in FY2024 to support additional tank waste storage options. See also HAB Advice #298.
		Central Plateau Cleanup
CP-a	Critical	WESF: Accelerate activities to complete WESF construction/permitting and to safely initiate and complete physical transfer of Cs/Sr capsules to dry storage pad in FY2024. Funding should be continuous to maintain trained workforce and continued progress until the project is successfully completed.
CP-b	Critical	WESF Basin Concrete Evaluation: Plan for testing on the basin walls after WESF capsules are removed to evaluate concrete degradation following high-activity exposure. The results would provide essential data for future structural design calculations leading to enhanced safety design and potential cost savings.
CP-c	Critical	P&T: Maintain, optimize, and expand current Groundwater P&T Program capabilities and operations. Expand P&T to BP-5/PO-1 and address deep vadose zone contamination.
CP-d	Critical	CWC: Support TPA agreements and deadlines to bring all stored wastes (indoors or outdoors) into compliance by characterizing, removing, treating, packaging, and final disposal of wastes.
CP-e	Critical	ERDF Support: Conduct sufficient soil remediation such that clean fill is not required to support ERDF operation. Note: The soil remediation could be central plateau or river corridor, but ERDF is central plateau.
CP-f	Important	Offsite Waste Shipments: Establish an engineering assessment and agreed-upon shipping schedules with WIPP and other facilities for all planned Hanford waste shipments to those facilities, to assure Hanford's place in line is protected.
CP-g	Important	Cribs: Begin 200-CW-5/PW 1,3,6 remedial activities, consistent with the schedule outlined in the RAWP.

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Item	Priority Level	FY2024 Cleanup Activity Description
CP-h	Important	T/B Plants: Begin removal actions at T and B Plants.
CP-i	Important	Waste Characterization: Initiate/continue waste site characterization associated with milestone M-015 (OUs: SW-2, WA-1, CW-3) to accelerate submittal of RI/FS documents.
CP-j	Important	Orphan Wastes: Evaluate the generation and planned disposal of all Hanford waste streams being generated that do not have a clear disposition (eg, TSCR ion exchange columns, German logs, etc), and identify needed additional required funding to address them.
		River Corridor Cleanup
RC-a	Critical	324 Building: Complete required prep and begin remediation of underlying soils. Funding should be continuous to maintain trained workforce and to continue progress until the project is successfully completed.
RC-b	Critical	Groundwater Cleanup: Accelerate remediation and groundwater cleanup in the River Corridor through efficient optimization of extraction well networks and associated P&T facilities.
RC-c	Important	100-N ROD: Complete ROD for 100-N, and develop an expedited schedule to begin the prescribed remedy.
RC-d	Important	105-KW Basin: Begin demolition of the 105-KW basin.
		Indirect/Supporting Activities
ISA-a	Critical	<p>Workforce Issues: Develop a comprehensive, defense-in-depth plan for EPA, Ecology, and the general public review that describes how DOE will assure workforce availability in the future. This plan should:</p> <ul style="list-style-type: none"> a. engage the current workforce in Hanford workforce planning and development. b. identify any potential risks to accomplishing waste processing campaigns that require uninterrupted operations dependent on trained workers. c. make tangible investments in the next generation workforce (outreach efforts, career seminars, job fairs, under-utilized segments of the population, etc). (See Board Advice #305) d. assure workforce receives all necessary safety- and job-related resources.

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Item	Priority Level	FY2024 Cleanup Activity Description
		e. Reinforce in-place policies addressing harassment and bullying, and demand a culture of inclusion. f. Optimize rad worker dress/undress environment and procedures to improve productivity.
ISA-b	Critical	Worker Safety: Prioritize Hanford worker safety (see Board Values paper).
ISA-c	Critical	Expanded HAB and Public Involvement: Given DOE's commitment to expand diversity and inclusivity in the HAB; 1) Fully fund the Board to hold up to 6 full board meetings a year (with 1 of those being a regional meeting). 2) Expand and fund regional public engagement. 3) Reinstate travel reimbursement for Board alternates. 4) Invest in technological improvements for all Hanford public meetings, including Board meetings, to continue to grow the capacity for (virtual or technology-assisted) participation. Offer hybrid format for all future meetings. Reduce barriers/increase access of Virtual tours.
ISA-d	Critical	Hanford Funding Support: It is requested that DOE provide an engineering/operational plan for public review that defines how the existing assumptions of annual Hanford funding will be utilized to support both DFLAW operation and also the many other significant Hanford cleanup activities.
ISA-e	Critical	Hanford Site Funding: Ensure the RL cleanup mission is fully-funded to meet TPA milestones in addition to ORP funding.

Acronyms used in the above Table:

CWC – Central Waste Complex	P&T – Pump and Treat
DFLAW – Direct Feed Low Activity Waste	ROD – Record of Decision
E/W – East/West	RAWP – Remedial Action Work Plan
ERDF – Environmental Restoration Disposal Facility	SST – Single Shell Tank
FY – Fiscal Year	TRU – Transuranic Waste
OU – Operable Units	WESF – Waste Encapsulation and Storage Facility
	WTP – Waste Treatment Plant